

one or more turbo nozzles coupled to the platform, the turbo nozzles being in fluid communication with a source of cleaning solution.

90. A vehicle washing system of claim 89, further comprising a control system and a plurality of sensors vertically disposed on the framework, the plurality of sensors being electrically coupled to the control system, wherein the sensors send signals to the control system when activated and the control system directs the vertical movement of the platform based on the signals.

91. The vehicle washing system of claim 89, wherein the turbo nozzles are coupled to the platform by one or more wands, the one or more wands being pivotally attached to the platform.

92. The vehicle washing system of claim 89, wherein the framework comprises an inverted U-shaped gantry, the gantry being adapted for linear movement along a vehicle during operation of the vehicle washing system.

93. The vehicle washing system of claim 89, wherein the platform is also adapted for pivotal movement relative to the framework about a rotational axis .

94. The vehicle washing system of claim 1 wherein the one or more nozzles are turbo nozzles.

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95. The vehicle washing system of claim 2, wherein the one or more nozzles are turbo nozzles.

96. The vehicle washing system of claim 24, wherein the one or more nozzles are turbo nozzles.

97. The vehicle washing system of claim 27, wherein the one or more nozzles are turbo nozzles.

98. A method of washing top surfaces of a vehicle using a gantry-type vehicle washing system, the method comprising:

moving a gantry relative to the vehicle along a path generally parallel to a longitudinal axis of the vehicle;

determining a height profile of the vehicle as the gantry is moved relative to the vehicle along the path;

vertically moving a platform coupled with the gantry based on the height profile as the gantry is moved relative to the vehicle along the path; and

spraying a cleaning solution onto the top surfaces of the vehicle from a plurality of turbo nozzles, the turbo nozzles being coupled with the platform.

99. The method of claim 98, wherein said determining a height profile further comprises repeatedly determining as the gantry moves along the path whether a height of

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a section of the vehicle over which the gantry is moving is lower than one or more preset vertical distances above the ground surface ; and wherein said vertically moving a platform further comprises moving the platform to a preset position of two or more of preset positions above the ground surface based on a preset vertical distance of the one or more preset vertical distances that is higher than the height of the section.

100. A method of washing a top surface of a vehicle using a vehicle washing system, the method comprising:

determining a height profile of the vehicle; and

moving one or more turbo nozzles disposed above the vehicle vertically to maintain a distance between the one or more nozzles and the top surface within a predetermined range of distances.

101. The vehicle washing system of claim 76, wherein the plurality of nozzles are turbo nozzles.

102. The method of claim 82, wherein the one or more high pressure nozzles of the first set are turbo nozzles.

103. The method of claim 102, wherein the one or more high pressure nozzles of the second set are turbo nozzles.

104. A vehicle washing system comprising:

a framework;

a platform moveably coupled with the framework, the platform being capable of vertical movement relative to the framework;

one or more turbo nozzles in fluid communication with a source of cleaning fluid coupled to the platform, the turbo nozzles being in fluid communication with a source of cleaning solution;

a plurality of turbo nozzles in fluid communication with the source of cleaning fluid spaced vertically in relation to each other on the framework, the plurality of turbo nozzles being segmented into a first set and a second set, the turbo nozzles of the first set being attached to the framework generally vertically below the nozzles of the second set; and

one or more valves for controlling a flow of cleaning solution to the first and second sets, wherein cleaning solution flows to the first set and not the second set in a first mode of the one or more valves and cleaning solution flows to both the first and second sets in a second mode of the one or more valves.

105. The vehicle washing system of claim 104, further comprising:

a sensor located a preset vertical distance from a ground surface, the sensor being triggered when a section of a vehicle having a height greater than the preset vertical distance passes in front of the sensor; and

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a control system operationally coupled with the sensor and the one or more
valves;

wherein the control system configures the one or more valves into (i) the first
mode when the sensor is triggered, and (ii) the second mode when the sensor is not
triggered.

Respectfully submitted,

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